

One new troglophilous species of the genus *Sinopoda* (Araneae, Sparassidae) from Guizhou, China

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Abstract — One new species of the genus *Sinopoda* is described under the name of *Sinopoda mi* from a cave in Yanhe Tujia Autonomic County, Guizhou, southwestern China, with a note of its natural history.

Key words — Sparassidae, *Sinopoda*, new species, cave, Guizhou, China.

Introduction

Spiders of the family Sparassidae are ecribellate, entelegyne, and medium to very large in size; they are nocturnal, wandering spiders, which spin no web, but often build silk retreats (Song *et al.* 1999). The soft trilobate membrane dorso-distally situated on metatarsus is regarded as diagnostic and apomorphic character for this family. Members of this group are distributed worldwide with 83 genera and 1056 species recognized (Platnick 2008) and 87 species belonging to 10 genera are known in China.

The sparassid genus *Sinopoda* was established by Jäger (1999), who recognized 25 species including 14 undescribed ones from Japan, Korea, China, Thailand, Malaysia and east India as members of this genus. *Sinopoda* was revised in detail mainly in China and Japan; many new species were described and many known species were transferred to this genus by Jäger (1999), Jäger & Ono (2000, 2001, 2002), Jäger & Yin (2001), Jäger *et al.* (2002), Liu *et al.* (2008) and so on. Up to now, 37 species of this genus have been recorded, of which 29 species occur in China.

The purpose of this contribution is to describe one new species of *Sinopoda* from a cave in Yanhe County, Guizhou, southwestern China.

Materials and methods

All measurements were made at the widest or longest point of a structure and given in millimetres. Vulvae were carefully excised, placed in temporary mounts and cleared in warm solution of KOH. Drawings of figures were made under a Spencer Buffalo microscope and a Tech XTL-II stereomicroscope equipped with an Abbe drawing device. Spine notation follows Davies (1994). Taxonomic descriptions and terminology follow Jäger (1999) and Jäger & Ono (2000).

The acronyms and abbreviations used in the text are as follows: ALE: anterior lateral eye; AME: anterior median

eye; AW: anterior width of carapace; CH: height of clypeus; OL: abdomen length; OW: abdomen width; PL: carapace length; PLE: posterior lateral eye; PME: posterior median eye; PW: carapace width; RTA: retrolateral tibial apophysis; SL: sternum length; SW: sternum width.

Taxonomy

Family Sparassidae Bertkau, 1872

Genus *Sinopoda* Jäger 1999

Sinopoda mi sp. nov.

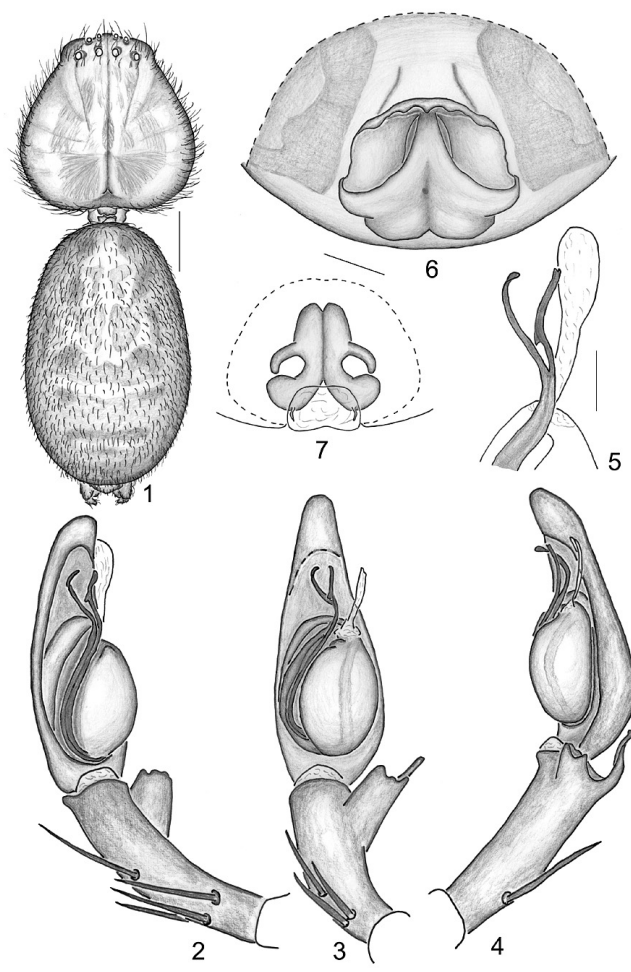
(Figs. 1–7)

Types Material. Holotype: Male from Mi Cave (28° 39.5'N, 108° 10.1'E, 802 metres above sea-level), Shapi village, Huangtu town, Yanhe Tujia Autonomic County, Guizhou province, 6 October 2007, collected by H. M. Chen. Paratype: One female, data are same as holotype. The specimens are deposited in the College of Life Sciences, Hebei University, Baoding, China (HBU).

Diagnosis. This new species is similar to *Sinopoda triangulara* Liu, Li & Jäger, 2008, but is distinguished from the latter by the slender embolic apophysis (Figs. 2–4), whereas in *S. triangulara* the embolus has a triangular structure on apical part, and the head of spermatheca arises from middle of basal part (Fig. 7), whereas the head arises from distal part in *S. triangulara*.

Description. Male (holotype). PL 5.41, PW 4.79, AW 2.54, OL 6.32, OW 3.67. Eye sizes and interdistances: AME 0.20, ALE 0.25, PME 0.20, PLE 0.28, AME-AME 0.20, AME-ALE 0.15, PME-PME 0.33, PME-PLE 0.43, AME-PME 0.38, ALE-PLE 0.40, CH (AME) 0.45, CH (ALE) 0.35, SL 2.55, SW 2.60. Spination as in Table 1. Leg formula: 2431. Length of palp and legs as in Table 2.

Palpal tarsus longer than tibia. Chelicera with three teeth on anterior and posterior margins respectively, and several denticles between them. Embolus arising from tegulum in 8-o'clock-position, slightly slender. Dorsal part of RTA



Figs. 1–7. *Sinopoda mi* sp. nov., male holotype and female paratype. — 1, male habitus, dorsal view; 2, male left palp, prolateral view; 3, male left palp, ventral view; 4, male left palp, retrolateral view; 5, tip of embolus with conductor, ventral view; 6, female genitalia, ventral view; 7, female genitalia, dorsal view. Scale bar: 1, 2 mm; 2–4, 0.8 mm; 5, 0.2 mm; 6–7, 0.4 mm.

slender, digitiform, bent, slightly S-shaped and obtuse at apex, ventral part triangle-shaped with concave in retrolateral view (Fig. 4). Sperm duct almost straight (Fig. 3).

Color. Prosoma yellowish, with irregular dark markings formed by long dark lodged hairs, and with marginal hairs on carapace (Fig. 1); radial pattern of carapace distinct; chelicera darker; sternum and coxae lighter, yellowish; sternum without darker margin. Opisthosoma dorsally dark and hairy, with dark markings, four pairs of dark spots and a dark posterior transversal band (Fig. 1); ventrally hairy, gray.

Female (paratype). Similar in overall appearance to male, but slightly bigger and darker. PL 6.02, PW 4.90, AW 3.06, OL 6.22, OW 4.08. Eye sizes and interdistances: AME 0.18, ALE 0.33, PME 0.25, PLE 0.35, AME-AME 0.30, AME-ALE 0.15, PME-PME 0.43, PME-PLE 0.48, AME-PME 0.44, ALE-PLE 0.45, CH (AME) 0.40, CH

Table 1. Spination of *Sinopoda mi* (male holotype).

	Palp	Leg I	Leg II	Leg III	Leg IV
Femur	1310	2230	3130	3130	1330
Patella	1010	1010	1010	1010	0010
Tibia	1210	1318	1318	2326	2226
Metatarsus	—	1014	1014	3036	3036

Table 2. Length of palp and legs of *Sinopoda mi* (male holotype).

	Palp	Leg I	Leg II	Leg III	Leg IV
Femur	3.57	5.51	8.26	7.04	7.14
Patella	1.58	2.04	3.06	2.65	2.35
Tibia	1.94	5.61	8.98	6.43	7.04
Metatarsus	—	5.71	9.59	6.63	8.06
Tarsus	2.30	2.14	2.55	2.14	2.55
Total	9.38	21.11	32.44	24.89	27.13

Table 3. Spination of *Sinopoda mi* (female paratype).

	Palp	Leg I	Leg II	Leg III	Leg IV
Femur	1310	3230	3130	3230	1330
Patella	1010	1000	1000	0000	0000
Tibia	2130	1018	1018	2026	2026
Metatarsus	3030	1014	1026	1016	3036

Table 4. Length of palp and legs of *Sinopoda mi* (female paratype).

	Palp	Leg I	Leg II	Leg III	Leg IV
Femur	2.41	5.92	6.53	6.33	5.92
Patella	1.29	2.55	2.65	2.55	2.24
Tibia	1.55	4.49	6.22	6.22	5.61
Metatarsus	—	5.00	5.51	5.41	5.71
Tarsus	2.08	1.43	1.33	1.73	2.04
Total	7.33	19.38	22.24	22.24	21.52

(ALE) 0.33, SL 2.54, SW 2.61. Spination as in Table 3. Leg formula: 2(3)41. Length of palp and legs as in Table 4.

Palpal claw with 8 teeth. Epigynal field approximately quadrate, with two long anterior bands, slightly bent (Fig. 16); posterior part of vulva wider than anterior (Fig. 7).

Color: Similar to male.

Distribution. Known only from the type locality.

Etymology. The specific name refers to the type locality, Mi Cave. The “mi” from the Tujia’s language means “water enters a cave, falls down, and then disappears”.

Natural history. Specimens of this species were collected from entrance zone of the cave (light zone). The cave is huge, maybe 100 metres deep, foggy and moist; a stream flows into its opening and along it forward, and then falls down. Spiders were found under stones and in gravel.

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